Case 2763

Coccinella undecimnotata Schneider, [1792] (currently *Hippodamia (Semiadalia) undecimnotata*; Insecta, Coleoptera): proposed conservation of the specific name

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Abstract. The purpose of this application is to conserve the specific name of *Coccinella undecimnotata* Schneider, [1792]. The name is threatened by the hitherto unrecognised senior synonym *Coccinella oculata* Thunberg, 1781. The ladybird beetle *Coccinella undecimnotata* is a widespread southern European species that has been the object of considerable study outside the field of taxonomy and is one that plays a significant part in the natural control of aphid pests of various crops in the south and east of the continent.

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1. The ladybird beetle currently known as *Hippodamia (Semiadalia) undecimnotata* was first identified (Schneider, [1792a], p. 165; see Hagen, 1863, p. 134 for the date of publication) as '*Coccinella 11maculata*, Fabr.?' However, later in the same year the author (Schneider, [1792b], p. 379) corrected his error and named the species *Coccinella 11notata*, now cited as *undecimnotata*. After his death, Schneider's collection was sold ([Kühl], 1828, p. iv; Horn & Kahle, 1936, p. 247) and its present whereabouts are unknown. It is therefore not possible to establish the identity of *C. undecimnotata* by examination of the original material. However, a suite of salient features referred to in the original description (especially the combination of a black pronotum with yellow anterior angles, a pyrrhiform communal elytral black spot immediately behind the scutellum and five other separate black spots on each elytron), together with the redescription and clear illustrations of the species by Olivier (1808, p. 1018, pl. 98.1, fig. 4a & b, pl. 98.16, fig. 76), Mulsant's comments (1846, p. 65) and present-day detailed knowledge of Europe's limited coccinelline fauna, leave no room for doubt that Schneider's *Coccinella undecimnotata* [1792] is the species currently known as *Hippodamia (Semiadalia) undecimnotata* (Schneider). Under such circumstances, the designation of a neotype is not justified (Article 75b).

2. Recent studies (Pope, 1987, p. 61) have rediscovered the identity of *Coccinella oculata* Thunberg (1781, p. 14, fig. 18), unjustifiably re–named by Olivier (1791, p. 62) as *Coccinella circularis* and by Herbst (1793, p. 278) as *Coccinella omma* and, ever since the last date, regarded as a species inquirenda (Mulsant, 1850, p. 1046; Crotch, 1874, p. 9; Korschefsky, 1932, p. 582).

3. *Coccinella oculata* Thunberg, 1781 is a senior synonym of *Coccinella undecimnotata* Schneider, [1792]. Its identity was established (Pope, 1987, p. 61) by examination of Thunberg's original material in the collections of the Zoological Museum of the University of Uppsala, Sweden and the designation of a lectotype therefrom. It follows that the earliest available name for the taxon is *C. oculata*.

4. As with many common and variable ladybird species, *Coccinella undecimnotata* Schneider, [1792] has had a large number of available names applied to it. The most recent world catalogue (Korschefsky, 1932) lists a total of 22: 17 as names of 'aberrations', two as synonyms of *undecimnotata* and two as junior synonyms of names applied to 'aberrations'. The earliest valid name listed by Korschefsky (p. 362) is *undecimnotata* Schneider [1792b], p. 379. This has been constantly used as the valid name of the taxon since 1846 (Mulsant, p. 63) and in the last 60 years the name in combination with one or other of four generic names (*Adonia*, *Adalia*, *Semiadalia* and *Hippodamia* (*Semiadalia*)) has appeared in more than 50 papers in scientific journals, several monographic treatments of the beetle family COCCINELLIDAE and one textbook on their biology. The publications are the work of more than 15 different authors (see Ferran et al., 1984, Hodek (Ed.), 1966 (which includes 17 papers by six different authors in which the species is mentioned) and Hodek, 1973). A representative list of 24 additional references has been given to the Commission Secretariat. *Coccinella oculata* Thunberg, 1781 and its objective synonym *Coccinella circularis* Olivier, 1791 threaten the stability of a long-established and widely used name.

5. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the following specific names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
  (a) *oculata* Thunberg, 1781, as published in the binomen *Coccinella oculata*;
  (b) *circularis* Olivier, 1791, as published in the binomen *Coccinella circularis*;

(2) to place on the Official List of Specific Names in Zoology the name *undecimnotata* Schneider, [1792], as published in the binomen *Coccinella undecimnotata*;

(3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the following names:
  (a) *oculata* Thunberg, 1781, as published in the binomen *Coccinella oculata* and as suppressed in (1)(a) above;
  (b) *circularis* Olivier, 1791, as published in the binomen *Coccinella circularis* and as suppressed in (1)(b) above.

References

Crotch, G.R. 1874. *A Revision of the coleopterous family Coccinellidae*. xv, 311 pp. Janson, London.

Ferran, A., Cruz de Boelpaepe, M.O., Buscarlet, L.A., Larroque, M.M. & Schanderl, H. 1984. Les relations trophiques entre les larves de la coccinelle *Semiadalia undecimnotata* Schn. et le puceron *Myzus persicae* Sulz.: généralisation à d'autres couples 'proieprédateur' et influence des conditions d'élevage de l'auxiliaire. *Acta Oecologica, Oecologia Applicata*, **5**: 85–97.

Hagen, H.A. 1863. *Bibliotheca Entomologica*, vol. 2 (N–Z), 512 pp. Engelmann, Leipzig.

Herbst, J.F.W. 1793. *Natursystem aller Insecten: die Käfer*, vol. 5. xvi, 392 pp., pls. 44–59. Pauli, Berlin.

Hodek, I. (Ed.). 1966. *Ecology of aphidophagous insects. Proceedings of a Symposium held in Liblice near Prague, September 27–October 1, 1965*. 360 pp., 10 pls. Junk, The Hague.

Hodek, I. 1973. *Biology of Coccinellidae*. 260 pp., 905 figs.; 34 pls. Junk, The Hague.

Horn, W. & Kahle, I. 1936. Uber die Sammlungen. Teil II. *Entomologische Beihefte aus Berlin–Dahlem*, **3**: 161–296.

Korschefsky, R. 1932. Coccinellidae. *Coleopterorum Catalogus*, part 120. Pp. 225–659. Junk, Berlin.

[Kuhl, H.] 1828. *Verzeichniss der zur Verlassenschaft des Herrn Schneider gehörigen Insectensammlung*. iv, 94 pp. Könliche Regierungs–Buchdruckerei, Stralsund.

Mulsant, E. 1846. *Sulcicolles Sécuripalpes. Histoire naturelles des Coléoptères de France*, vol. 4. xxiv, 280, 26 pp., 1 pl. Maison, Paris.

Mulsant, E. 1850. Species des Coléoptères trimères sécuripalpes. *Annales des Sciences Physiques et Naturelles d'Agriculture et de l'Industrie, Lyon*, (2)**2**: 1–1104.

Olivier, A.G. 1791. *Encyclopédie Méthodique. Histoire Naturelle. Insectes*, vol. 6, 704 pp. Panckoucke, Paris.

Olivier, A. G. 1808. *Entomologie ou Histoire Naturelles des Insectes, Coléoptères*, vol. 6, no. 98 (Coccinelle. *Coccinella*), pp. 985–1061, pls.1–7. Desray, Paris.

Pope, R.D. 1987. The Coccinellidae (Coleoptera) described by C.P. Thunberg. *Entomologica Scandinavica*, **18**(1): 51–66.

Schneider, D.H. [1792a]. Verzeichniss und Beschreibung der in der Sammlung des herausgebers befindlichen zur Gattung *Coccinella* gehörigen europäischen Käfer (Sonnen–Käfer oder Blattlaus–Käfer). *Neuestes Magazin für die Liebhaber der Entomologie*, **1**(2): 129–185.

Schneider, D.H. [1792b]. Beyträge zur Synonymie, nebst sonstigen Bemerkungen über die von dem Herrn Prof. Fabricius in seiner *Entomologia Systematica* angeführten europäischen Insectenarten. *Neuestes Magazin für die Liebhaber der Entomologie*, **1**(3): 257–384.

Thunberg, C.P. 1781. *Dissertatio entomologica. Novas Insectorum Species sistens*, part 1, 28 pp., 1 pl. Uppsala.